Co.: roadside, 6 miles east-northeast of Hartwell; Hartwell. Franklin Co.: Royston. Barrow Co.: Winder. Wilkes Co.: Washington. Lincoln Co.: upland oak woods, 4.5 miles southwest of Lincolnton.

THE LAND SNAILS OF HENRICO COUNTY, VIRGINIA

By JOHN BAYARD BURCH

University of Richmond

Henrico, one of the smaller counties of Virginia, has an area of 234 square miles. It is situated just east of the center of Virginia, and has an elevation varying from tide water, in the southeastern part, to above 260 feet in the northwestern part. The greater portion of the county is from 150 to 250 feet above sea level. The northern boundary is formed by the Chickahominy Rivery, arising in the northwest corner and flowing into the James River below Charles City. The southern boundary is formed by the James. Numerous small streams drain the county, flowing into these two rivers. The western two-thirds of the county is a part of the Piedmont Plateau physiographic province, the eastern part belonging to the Coastal Plain.

Several of the land Mollusca of Henrico County were listed by Dr. Paul R. Burch in his article "Mollusks" in the Virginia Academy of Science publication The James River Basin, Past, Present, and Future in 1950. These included the snails Discus patulus Deshayes (not found by the author), Haplotrema concavum (Say), Mesodon thyroidus (Say), Stenotrema hirsutum (Say), Triodopsis fallax (Say), and Ventridens (= Zonitoides) arboreus (Say). Two additional species, Helicodiscus parallelus (Say) and Retinella indentata (Say), were reported by personal communication. Triodopsis obsoleta (Pilsbry) was listed by Hubricht (1953) as being an introduced form in Richmond but specimens have not been found by the author. Dr. Henry A. Pilsbry (1939–48) does not list any snails from Henrico County in his Land Mollusca of North America (North of Mexico).

The land snails are represented in Henrico County by eight families. Twenty-four species and subspecies are listed in this paper. Their distribution seems to depend on the availability of calcium compounds, organic material upon which to feed, moisture, and cover.

CARYCHIDAE

Carychium exiguum (Say). Generally distributed under and among decaying leaves in damp places, but not common.

PUPILLIDAE

- Columella edentula (Draparnaud). Numerous specimens found near White Oak Swamp Creek, VA. 717; Willis' Church, VA. 156; and White Oak Swamp Creek, VA. 156. In most cases this species was found under and among decaying maple, sweet gum, and oak leaves.
- Gastrocopta contracta (Say). This species is fairly common throughout the county. It is usually found around or under the bark of damp hardwood logs and stumps, and in all cases has been found associated with forested stream valleys.
- Gastrocopta pentodon (Say). Found only at the old coal mine on Gayton Road, VA. 706.
- Pupoides albilabris (C. B. Adams). Found only near White Oak Swamp Creek, VA. 802 in and around decaying oak and maple stumps.

SUCCINEIDAE

Succinea aurea (Lea). Found in the central part of the county along the James River. This species is generally picked up from rocks near the waters edge. Not common.

ENDODONTIDAE

- Anguispira alternata angulata (Férussac). Generally distributed over the northern and western parts of the county, but most common along the Chickahominy River lowlands. This species has been found associated with a variety of hardwoods.
- Helicodiscus parallelus (Say). Very common throughout the woodland areas. It is found most common in hardwood forests. Exceeded in abundance only by Zonitoides arboreus.

ZONITIDAE

- Hawaiia minuscula (Binney). Found along the James River lowlands in the eastern part of the county and around the masonry of St. James Baptist Church, VA. 5.
- Retinella indentata (Say). In small numbers in scattered localities throughout the county, but not very common.
- Striatura milium (Morse). Several specimens occurred in lots collected near Short Pump, U. S. 250.
- Ventridens ligera (Say). Not common. Found on VA. 605 near the James River, Wilton Creek, VA. 611, and near Laurel Pond, on Hungary Creek, U. S. 33.
- Ventridens suppressus magnidens Pilsbry. Generally distributed over the county but not altogether common. It has been found in a variety of habitats, from under hardwood logs to around stone masonry in urbanized areas.
- Zonitoides arboreus (Say). This species is probably the most common land snail found in the county in both number of specimens and distribution. It is not restricted to woodlands and it apparently has no preference to any particular hardwood.

STROBILOPSIDAE

Strobilops aenea Pilsbry. Found predominately under the bark of oak logs. This species is fairly common in the county.

Strobilops labyrinthica (Say). Generally distributed but not as common as S. aenea. These two species are sometimes found together.

HAPLOTREMATIDAE

Haplotrema concavum (Say). Extremely common, being found wherever the habitat is favorable for other snails.

POLYGYRIDAE

- Mesodon appressus sculptior Chadwick. This snail was found from only one locality in Henrico County, James River, VA. 605, but has been found commonly along the cliffs on the Chesterfield County side of the James River.
- Mesodon thyroides (Say). This is a common snail in the Piedmont division, prevailing along the James River. It is most generally associated with woodlands having a predominance of oaks.

- Stenotrema hirsutum (Say). Found only in the woods surrounding Westhampton Lake, University of Richmond, but very common here. These individuals comprise a small race, averaging somewhat less than 7 mm. in diameter.
- Triodopsis albolabris (Say). Generally distributed over the county but not very common.
- Triodopsis fallax (Say). Abundant in the central part of the county. This species is generally found around dwellings and gardens and is seldom found associated with hard or softwoods.
- Triodopsis hopetonensis (Shuttleworth). Found only in the southeastern tip of the county in the James River lowlands.
- Triodopsis tridentata juxtidens (Pilsbry). Abundant over the entire county. Unlike T. fallax, this species is generally restricted to the woodlands.

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LITERATURE CITED

Burch, Paul R., 1950: "Mollusks," The James River Basin, Past, Present, and Future, James R. Proj. Comm., Va. Acad. Sc., pp. 129-137.

Hubricht, Leslie, 1953: Land Snails of the Southern Atlantic Coastal Plain, The Nautilus, vol. 66, no. 4, pp. 114–125.

Pilsbry, Henry A., 1939-48: Land Mollusca of North America, etc., vols. 1 and 2, Acad. Nat. Sc., Phila., 2215 pp., 1166 figs.

NOTES AND NEWS

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